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Shorter Note

A new station for Dicranopteris flexuosa in Florida.—Dicranopteris flexuosa (Schrader) L. Underw. has been reported in the continental United States from only four locations: Bay, Hillsborough, and Osceola counties, Florida, and Mobile County, Alabama. The plants have disappeared from all but the Bay County, Florida location (Wherry, The Southern Fern Guide, 1964; Burkhalter, Amer. Fern J. 75:79. 1985.) We are here reporting a new station for this species in Palm Beach County, Florida. This is the first such report for southern peninsular Florida. The new location was discovered in November of 1988 by Steve Farnsworth, a local naturalist. The station is in northeastern Palm Beach County (T41S, R42E, sec. 25; vouchers at FAU, FTG, TENN, and USF) and consists of a single colony growing on the banks of an east-west drainage ditch. The colony is mostly within a strip ca. 24 m long and 1.2 m wide from the water's edge, with the greatest density on the north-facing bank, but with scattered plants on the southfacing bank. The ditch was cut deeply into the subsoil exposing an unusually thick layer of hardpan. This B-horizon has been identified as an Ortstein spodosol, and consists of sands cemented by organic acids, accumulated sesquioxides, or both. The hardpan layer creates a seepage zone that drains the surrounding land and provides a constant supply of moisture to the ditchbank. The vegetation type at the site is predominantly pine flatwoods community growing on mostly acid, leached sands. Associates on the ditchbank include: Blechnum serrulatum Rich., Drosera capillaris Poiret, Lycopodium cernuum L., and Lygodium microphyllum (Cav.) R. Br., as well as several grasses and sedges. According to the North County Water Control District, the drainage ditch was dug between 1977 and 1979, thus limiting the age of the colony to no more than 12 years. The existence of one clump, notably larger than all others, suggests a single colonization event and subsequent expansion. The colony is otherwise distinct in the generally larger, more robust, and more aggressive plants than have been documented for other locations in the continental United States, and it seems to be successfully spreading by both rhizomes and spores. The future of the station is uncertain. New school construction is scheduled for the site, and surrounding habitats are rapidly succumbing to development pressure, so that percolation and seepage may be disrupted. Also, a drop in the water table from well-field pumping may affect water levels in the ditch; both events are likely to have deleterious effects on the population.

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